



Spring 2015

# The EpiNotes Newsletter

*North Carolina Department of  
Health and Human Services*

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Cover: Pollen particles magnified (Courtesy of NIH/NIAID)

# Legionnaires' Disease at Multiple Long-Term Care Facilities — North Carolina, 2014

By Sarah Rhea, DVM, PhD; Tammra Morrison, RN; Jesse McDaniel, CIH, CSP; David Lipton, CIH; Megan Sanza, MPH; Jennifer MacFarquhar, RN, MPH; Kristin Sullivan, MPH; Jean-Marie Maillard, MD, MSc; Zack Moore, MD, MPH.

**L**egionnaires' disease (LD) is a severe multisystem illness caused by *Legionella* bacteria and characterized by pneumonia, cough, fever, and muscle aches. *Legionella* bacteria are found in man-made and natural aquatic environments and are transmitted by inhalation of aerosolized water colonized with the bacteria. The risk of LD after exposure to *Legionella* bacteria depends on the type of exposure and the health status of the exposed person. Risk factors for LD include age older than 50 years, use of respiratory equipment (e.g., nebulizers), and the presence of immunocompromising conditions, especially chronic lung disease. Diagnosis of LD is often through *Legionella* urinary antigen testing, which detects antigen to *Legionella pneumophila* serogroup 1 (the cause of about 80% of LD) in urine.

During June–October 2014, the North Carolina (N.C.) Division of Public Health identified five outbreaks of LD at different long-term care facilities (LTCFs) across the state. Before June 2014, the last LTCF-related LD outbreak in N.C. occurred in September 2004. We reviewed the five investigations (no links among outbreaks were identified) to assess *Legionella* remediation strategies and time from outbreak identification to *Legionella* eradication.

As part of this review, an LTCF-related LD outbreak was defined as greater than or equal to two LD cases (radiographically-confirmed

pneumonia and a positive *Legionella* urinary antigen test) occurring during a six-month period among persons with exposure in the same LTCF two to 10 days (incubation period for *Legionella*) before illness onset. Each LTCF collected representative environmental bulk water and swab samples for *Legionella* culture initially and after remediation until all environmental samples were *Legionella*-negative. Subsequently, environmental samples were collected routinely for six months to ensure *Legionella* eradication.

We identified 23 LD cases among these five LTCF-related LD outbreaks; median cases per outbreak was 3 (range: 2–8). Each LTCF had water system conditions favorable for *Legionella* amplification, including areas of stagnation and suboptimal hot water temperatures; none had a health care facility *Legionella* prevention plan. Upon outbreak identification, each LTCF implemented water restrictions until recommended 0.2-µm point-of-use filters (Photo) were installed and an environmental engineer was hired to address amplification conditions. *Legionella* was isolated from initial

environmental samples taken at four of the five LTCFs. Of these four, *Legionella* eradication was achieved after one-time water system superheating at one (25%) LTCF and after two rounds of superheating and hyper-chlorination at one (25%) LTCF. Time from outbreak identification to demonstration of persistent

*Legionella* eradication at these LTCFs was four weeks and 13 weeks, respectively. Despite remediation and engineering efforts, *Legionella* was persistently isolated from subsequent environmental samples at two LTCFs (50%); one LTCF performed one-time superheating, and one performed one-time superheating and hyper-chlorination. Control measures remain in place at these two LTCFs until *Legionella* eradication is complete. The LTCF with initial *Legionella*-negative environmental samples conducted one-time superheating; routinely collected environmental samples have remained *Legionella*-negative.

**Conclusion:** Standard remediation and engineering efforts achieved *Legionella* eradication over four to 13 weeks at two LTCFs where *Legionella* was isolated from initial environmental samples. However, low-level *Legionella* contamination persisted at two LTCFs despite similar efforts; complete *Legionella* eradication might require secondary disinfection or other protracted remediation strategies at these facilities.



Photo courtesy of Tammra Morri-



# Ambient Pollen and Allergic Disease in Wake County, 1999-2012.

By XueZheng Sun, PhD, MSPH and Lauren Thie, MSPH

Allergic diseases represent a critical health burden worldwide and in the US. Their occurrence has been increasing in the past decades<sup>1</sup>, which may be related to climate change. Pollen is an important allergen whose production and distribution are influenced by climate<sup>2,3</sup>, and potentially contributes to the elevated prevalence of allergic diseases. Describing the associations of meteorological factors, ambient pollen and allergic disease occurrence is of important to identify the potential climate impacts on public health. As a part of the Climate-Ready North Carolina (N.C.) program, this study characterized the pollen production and pollen season in Wake County, N.C., from 1999 to 2012, and evaluated the potential impact of ambient pollen on emergency department (ED) visits for allergic diseases.

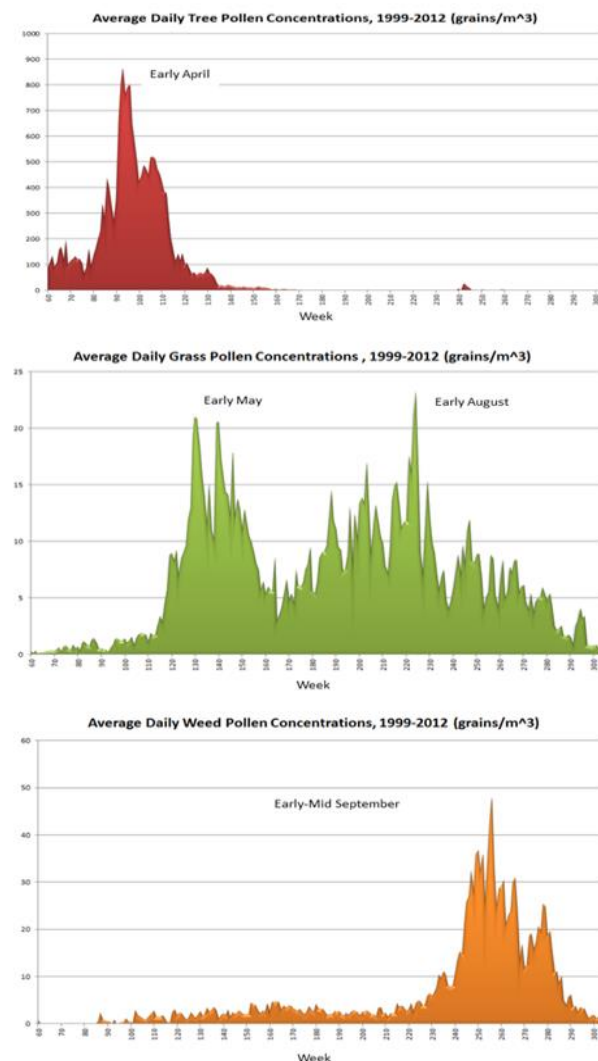
## Data Sources

**Pollen data:** The daily counts of ambient tree pollen, grass pollen, and weed pollen between March 1<sup>st</sup> and October 31<sup>st</sup> in 1999 to 2012, were collected by the Ambient Monitoring Section, N.C. Department of Environment and Natural Resources.

**Meteorological data:** Information on daily average temperature and precipitation during the study time period was collected from the monitoring site at Raleigh/Durham International Airport.

**ED visit data:** Allergic diseases include asthma (ICD-9-CM code: 493), allergic conjunctivitis

**Figure 1.** Average daily pollen concentration by type; tree (top), grass (middle), weed (bottom).



(ICD-9-CM code: 372.05 and 372.14), allergic rhinitis (ICD-9-CM code: 477.0, 477.8, and 477.9) and allergic dermatitis/dermatoses (ICD-9-CM code: 691.8, 692.9, and 373.3). The daily ED visits of these four allergic diseases in eight hospital-affiliated emergency departments in Wake County, NC, during March-October between 2006 and 2012, was provided by NC Disease Event Tracking and Epidemiologic Collection Tool (NC DETECT).

**Temporal Distribution of Pollen:** Tree pollen, grass pollen, and weed pollen concentration showed seasonal distributions in Wake County (Figure 1). Tree pollen constituted most pollen, particularly in March and April (accounting for up to 98% of total pollen, the maximum daily concentration= 3,524 grains/m³), mainly from oak and pine. Grass pollen concentration showed two peaks in May and August, respectively. Weeds pollen was dominant in September and October, with daily maximum of 94 and 61 grains/m³, respectively. Compared with grass/weed pollen (20-23 weeks), tree pollen had a shorter season of eight to 10 weeks.

Over the 14 years, annual tree pollen concentrations demonstrated an increasing trend. While the length of tree pollen season was relatively stable, the duration of grass and weed pollen season increased gradually from 1999 to 2012 due to the earlier start date (defined as day on which the accumulated concentration reached 2.5% of the annual total).

### The Influence of Temperature on Ambient Pollen Concentration:

The production and length of pollen season were influenced by temperature. The earlier start of the grass and weed pollen seasons was partially explained by higher spring temperatures. Annual grass and weed pollen concentrations were negatively associated with average summer (June, Ju-

ly, and August) temperatures. For tree pollen, the peak annual concentration was negatively associated with the mean February temperatures, while the total annual concentration was positively associated with the mean March temperatures.

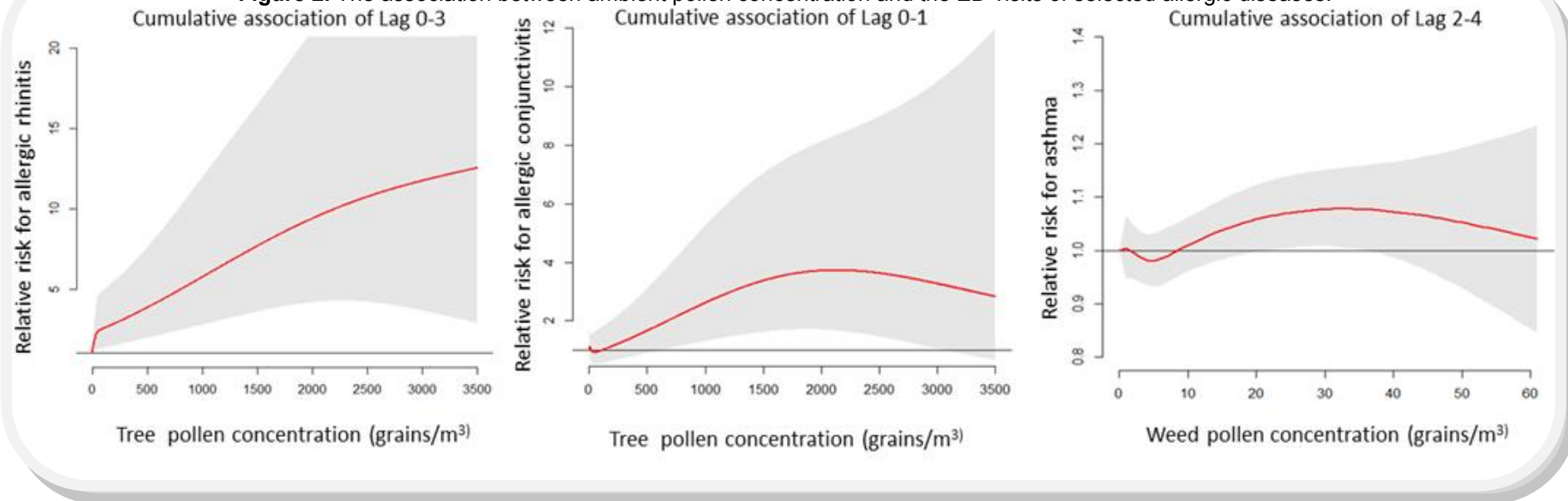
### The Association between Ambient Pollen Concentration and ED Visits of Allergic Diseases:

The short-term associations between ambient concentration of various pollen types (tree, grass, and weed) and ED visit for select-

ed allergic diseases were characterized by distributed lag nonlinear models (DLNM)<sup>4,5</sup>. A strong association between tree pollen and allergic rhinitis visits was detected without a significant delayed effect in time (*Figure 2*). This association lasted four days. Compared with a reference level 0 grains/m<sup>3</sup>, the 3-day cumulative risk ratio (RR) was 3.0 (95% confi-

**Conclusion:** During 1999-2012 in Wake County, the annual tree pollen concentration and the length of grass and weed pollen seasons gradually increased. These changes were partially explained by higher spring temperature, and likely further increased the risk of allergic disease.

**Figure 2.** The association between ambient pollen concentration and the ED visits of selected allergic diseases.



dence interval [CI]=1.6-5.9) at concentration of 265 grains/m<sup>3</sup> (the standard deviation of tree pollen concentration). An immediate but short (lasted 2 days) effect of tree pollen was also observed on allergic conjunctivitis visits (2-day cumulative RR at SD =1.72, 95% CI=0.70-2.29). The association between weed pollen and asthma visits was weak, with a two-day delay and lasting 3 days (the strongest and significant 3-day cumulative RR=1.1, 95% CI=1.0-1.2, at concentration of 32 grains/m<sup>3</sup>).

### References

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4. Gasparrini A. Distributed lag linear and non-linear models in R: The package dlnm. *J Stat Softw.* 2011;43(8):1-20.
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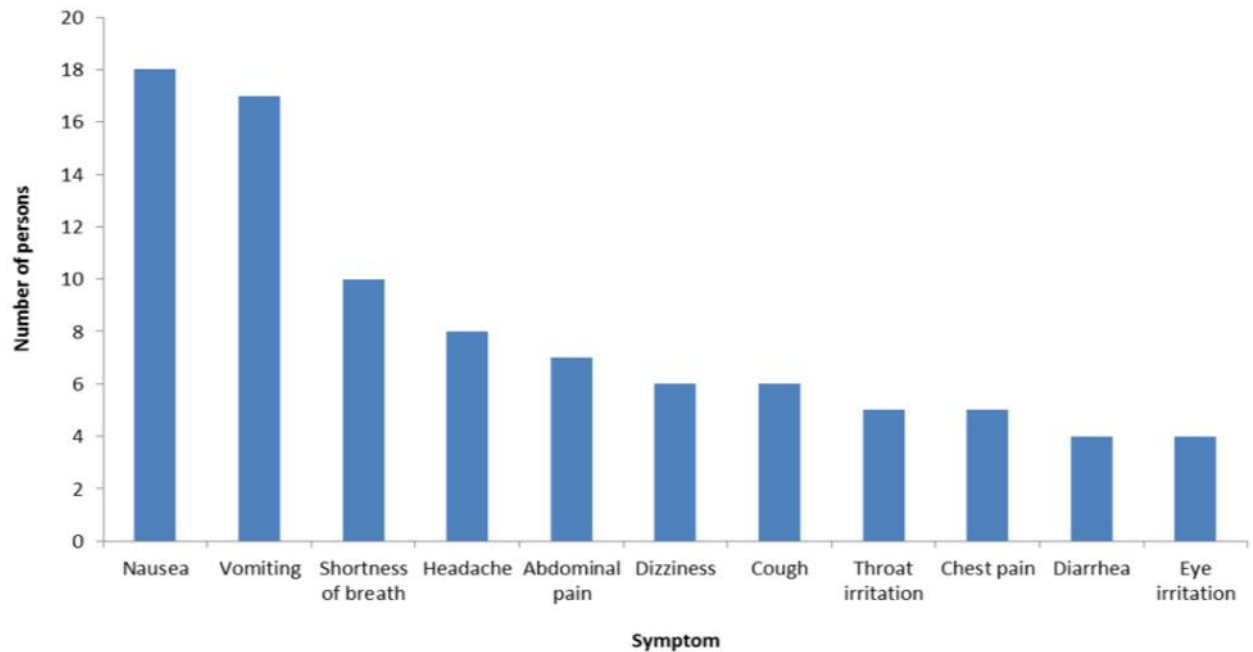
# Pesticide Exposure in a Food Distribution Warehouse— North Carolina, August 2014

By Annie Hirsch, MPH, Ricky Langley, MD, MPH, Jesse McDaniel, CIH, CSP, and Kelly Brantham

On August 11, 2014, state and local public health officials were notified of a pesticide exposure in a central North Carolina food distribution warehouse. On August 7<sup>th</sup>, after employees left for the day, Company A's management directed the release of multiple pesticide foggers inside the warehouse to control an infestation of Indian meal moths and spiders before an upcoming inspection. After releasing the pesticides, management sealed the warehouse for the weekend. On the morning of August 11<sup>th</sup>, employees returned to work and began experiencing symptoms such as nausea, vomiting, and shortness of breath (see figure).

Seventeen employees of Company A, as well as a police officer who responded to the incident, were symptomatic and were seen in the local hospital's emergency department. Four employees were admitted to the hospital overnight, and the remaining 13 employees and police officer were treated and released.

After discussing the incident with staff from the Occupational and Environmental Epidemiology Branch (OEEB) and the N.C. Department of Agriculture and Consumer Services (N.C. DACS), the county health director issued an Order of Abatement of an Imminent Hazard for Company A on August 12<sup>th</sup>, which barred anyone from entering the building until a qualified contractor tested the facility and deemed it safe for re-entry. In addition, the order stated that any food products within the building needed to remain



**Figure 1. Symptoms Experienced by Employees and Police Officer Exposed to Pesticides in a Food Distribution Warehouse, North Carolina, August 2014**

in the building until they were released from embargo by the Food and Drug Division of N.C. DACS.

OEEB initiated a public health investigation on August 12<sup>th</sup> to determine exposure, symptoms and disposition of affected individuals and provide guidance on environmental sampling and remediation of the facility. Investigation activities included interviewing the exposed individuals, identifying the released pesticides, reviewing the cleanup contractor's plan for air and surface sampling inside the warehouse, and

determining when re-entry was appropriate. OEEB staff collaborated with the county health department, local authorities, Public Health Preparedness and Response Branch, N.C. DACS, N.C. Department of Labor, N.C. State Laboratory of Public Health, and U.S. Environmental Protection Agency throughout the investigation.

OEEB's Pesticide Incident Surveillance Program interviewed 12 (67%) of the 18 symptomatic individuals through a translator using a standard telephone questionnaire. The questionnaire included demographic



information, exposure history, and clinical signs and symptoms. The interviewed employees mentioned that similar pesticide incidents had occurred at the facility in the past. Employees were hesitant to discuss the incident and expressed concerns about losing their jobs and being able to pay their medical bills.

State and local authorities determined that two of the released pesticides, which contained cypermethrin, were labeled for residential use only, and the third released pesticide, which contained aluminum phosphide, was imported from Mexico and not registered in the United States. Company A hired an environmental contractor to perform air and wipe sampling in the warehouse. Reviewing the sampling plan, collecting and analyzing samples, and interpreting the results took several weeks. Sampling results showed acceptable chemical levels throughout the facility, so cleanup was not required.

On September 2<sup>nd</sup>, the local health director lifted the Order of Abatement of an Imminent Hazard, N.C. DACS lifted the embargo on food shipments, and Company A resumed business operations. The NC Structural Pest Control Committee fined the company \$10,000 for numerous violations related to this incident, and the NC Department of Labor's Occupational Safety & Health Division is currently investigating the incident. This event illustrates the significant occupational health consequences that can result when pesticides are used improperly in an industrial setting.

10A NCAC 41F .0102 REPORTING OF PESTICIDE RELATED ILLNESS OR INJURY

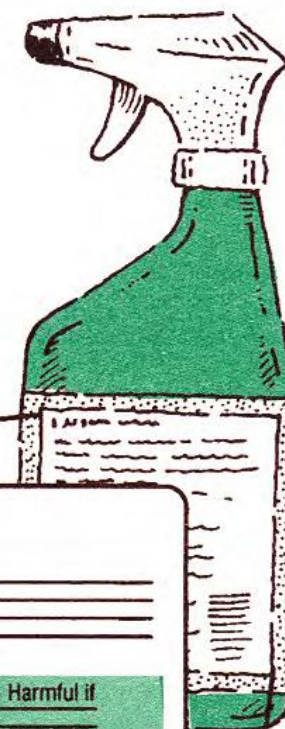
Physicians shall report the following named pesticide related illness or injuries that are considered harmful to the public's health within the time period specific after the illness or injury is diagnosed:

- (1) Acute pesticide related illness or injury—48 hours
- (2) Acute pesticide related illness or injury resulting in death—Immediately

## Always Read the Label!

**Key words:** *CAUTION* appears on pesticides that are the least harmful. A pesticide with the word *WARNING* is more poisonous than those with a *Caution* label. Pesticides with the word *DANGER* on the label are very poisonous or irritating.

**Exposure:** Always contact a doctor or local poison center.



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**PRECAUTIONARY STATEMENTS**

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS—CAUTION:** Harmful if \_\_\_\_\_

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**STATEMENT OF PRACTICAL TREATMENT (First Aid):** \_\_\_\_\_ **7** \_\_\_\_\_

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**ENVIRONMENTAL HAZARDS:** — **5** \_\_\_\_\_

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**PHYSICAL OR CHEMICAL HAZARDS:** Keep away from \_\_\_\_\_

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**DIRECTIONS FOR USE:** It is a violation of Federal law to use this product in a manner inconsistent with its labeling. — **6** \_\_\_\_\_

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**FOR USE ON:** \_\_\_\_\_

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**KILLS:** \_\_\_\_\_

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**STORAGE AND DISPOSAL:**

**Storage:** \_\_\_\_\_ **8** \_\_\_\_\_

**Disposal:** \_\_\_\_\_

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Photo courtesy of U.S. E.P.A.

# Assessment of Local Health Department STD Clinical Services—2013.

By Technical Assistance and Training Program (TATP Lead, Kathy Dail RN, MEd)

Local health departments in North Carolina continue to play a critical role in assuring high quality services for people with or exposed to sexually transmitted infections, including HIV. N.C. DHHS Division of Public Health (DPH) Communicable Disease Branch (CDB) conducted a 100 county assessment of Local Health Department (LHD) Sexually Transmitted Disease (STD) Clinical Services from March 2013 – December 2013. DPH leadership authorized the statewide assessment to capture baseline data on the evaluation, testing and treatment of clients presenting to the local health department for STD services. The assessment of LHD STD clinical services was the first statewide, on-site assessment in the history of NC Public Health.

## Methods

Nurse Consultants visited every county health department for a one day snapshot of STD Clinical Services. A Nurse Consultant audited an average of two charts per provider and a second STD Nurse Consultant observed clinical examinations for every STD Enhanced Role Registered Nurse (STD ERRN). Nurse Consultants also reviewed the agency's poli-

cies supporting STD Clinical Services. In larger counties, three to four nurse consultants assisted in order to complete the assessment in one day.

In February 2013, TATP developed new medical record audit and clinical observation tools. Tools were posted on the web in the DPH STD Manual and shared with counties prior to the site visit. TATP adopted a standard report template for the final report.

## Objectives

- Identify STD clinicians working in local health department STD clinics
- Directly observe STD Enhanced Role Registered Nurses (ERRNs)
- Roster STD ERRNs in a centralized data base with documentation of initial and continuing required experience and education credentials
- Monitor the practice of all clinicians through a statewide audit of STD clinical records,
- Review local policies as an indicator of LHD's commitment to quality STD services

Two months prior to the start of site visitation, the STD Nurse Consultant Quality Improvement Coordinator negotiated site visit times between DPH and the LHD. In order to complete the statewide assessment in one calendar year, an average of two to three counties were scheduled per week. However, due to state travel restrictions, site visits during the

month of June 2013 were rescheduled. The first visit occurred in March 2013 and the last visits occurred December 2013.

Site visits began with a brief overview of the process and a tour of the LHD STD clinic when possible. Nurse consultants selected medical records randomly from a set of clients seen over the previous six weeks. LHD staff provided policy manuals, approved abbreviation lists, approved signature files and a copy of the STD standing orders, along with personnel training records for STD ERRNs. While one or more Nurse Consultants reviewed medical records and policies, the STD Nurse Consultant observed the practice of the STD ERRNs.

STD Nurse Consultants gave STD ERRNs immediate feedback about the quality of the examination and the supporting medical record documentation. During the exit interview, the DPH Nurse Consultants presented a summary of findings, including recommendations for best practice and any immediate requirements. In every instance, the DPH Nurse Consultant informed the agency staff that assistance would be available to help with corrective action plans. Written reports were filed after the site visit to detail the onsite discussions.

DPH Nurse Consultants encouraged clinical staff and managers to attend one of 18 regional STD workshops, planned for February – April 2014; the regional workshops provided a summary of findings from the statewide assessment and recommendations for moving forward under the upcoming 2014 CDC STD Treatment Guidelines.

## Results

Local health departments utilize a combination of practice management models involving Physicians, Nurse Practitioners, Physician Assistants, Certified Nurse Midwives, and STD Enhanced Role Registered Nurses. LHD providers are supported by registered nurses, licensed practical nurses, disease investigation specialists, pharmacists, laboratory personnel, medical office assistants, as well as administrative support staff for client registration, coding and billing. **The statewide assessment confirmed a robust workforce with over 400 providers with active roles in providing STD Clinical Services (Figure 1):**

- 91 Physicians (medical directors)
- 49 Physicians providing direct client services (some may also serve as medical director)
- 23 Physician Assistants (PAs)
- 83 Nurse Practitioners (NPs)
- 6 Certified Nurse Midwives (CNWs)
- 165 STD Enhanced Role Registered Nurses (STD ERRNs)

The number of providers does not include:

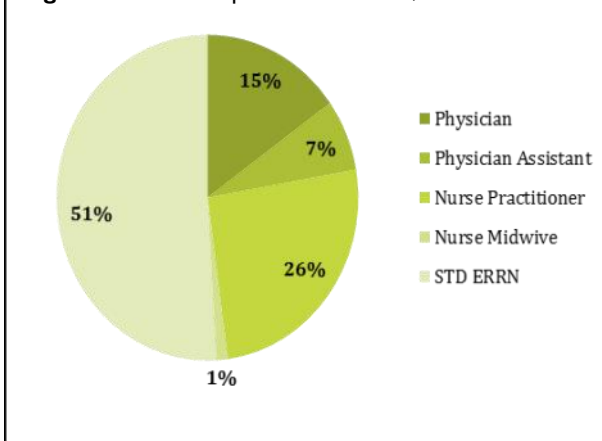
- 50-75 additional providers (MDs, DOs, PAs, FNPs and CNMs) providing STD evaluations in LHD Family Planning and Maternity clinics, but not included in the STD chart audit process.
- 100-200 Registered Nurses (RNs) and (Licensed Practical Nurses (LPNs) that support providers.

70 of 100 (70%) counties in North Carolina utilize STD ERRNs.

Overall, the statewide assessment identified the most significant concerns as:

- Unacceptable wait times for appointments in higher morbidity counties
- Unacceptable wait times in clinics in higher morbidity counties
- Unavailable services, particularly in counties with reported low STD morbidity

**Figure 1: STD clinic providers in LHDs, 2013.**



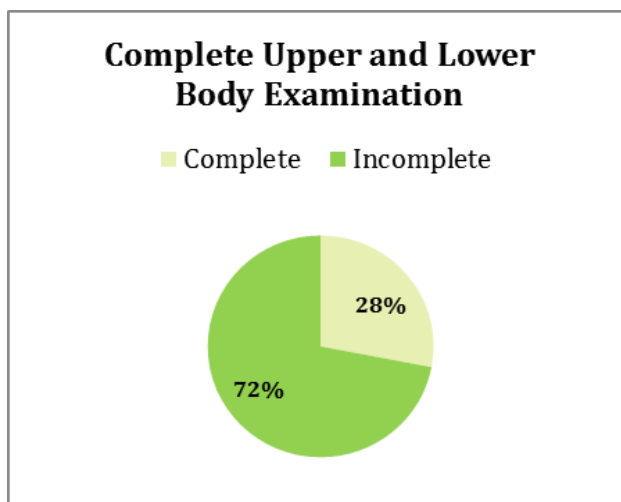
**Standing Orders:** The assessment found issues in most local health departments related to standing orders for STD ERRNs and Registered Nurses providing treatment and laboratory testing. All standing orders must be in the NC Board of Nursing (BON) format to assure that RNs and LPNs function within their respective scope of practice (DPH Memorandum, Joy Reed: February 12, 2012). The issues included standing orders that were:

- Incorrectly formatted, not NC BON format
- Outdated, with greater than one year since orders reviewed/signed by medical director
- Signed by a registered nurse, not a physician, for multiple years
- Listed alternative drug as first line therapy
- Combined with lab testing standing orders

- Inadequate with missing objective criteria
- Without discreet parameters requiring nurse to make choice between two or more drugs
- Missing, with nurses testing and treating based upon their knowledge of what the physician/mid-level usually ordered in similar situations

**Client Communication:** DPH provides opportunities for all health care providers to participate in Counseling, Testing and Referral (CTR) training that helps to desensitize the clinician to the language used by clients to describe sexual encounters and any inherent sexual risk behaviors and STD-associated symptoms. Originally developed to prepare staff to provide HIV counseling needs, the training also prepares health department clinicians to better serve the larger audience of people infected with other STDs. All STD ERRNs have completed CTR training; mid-level providers and physicians working in LHDs were not assessed for CTR training.

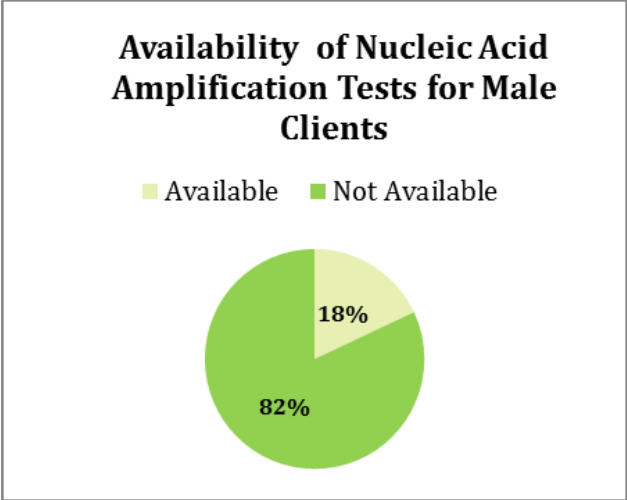
**Figure 2. Upper and Lower Body Exam Completion**





The assessment revealed that urine-based NAAT testing or GenProbe testing for male urethral discharge is only available in 18 of 100

Figure 3. NAAT Testing Availability.



county health departments (Figure 3). The inability to provide testing at no cost to the male client resulted in significant presumptive treatment for chlamydia by clinicians of all types. In some situations, clinicians varied treated for both gonorrhea and chlamydia and in other situations clinicians treated for chlamydia only. Health department STD clinics did not keep data on treatment failure associated with presumptive treatment.

**Medical Records:** The assessment occurred at a time when local health departments were transitioning from paper-based to electronic medical record documentation in the STD clinic. The lowest cost option for medical record billing and clinical data is HIS/Avatar. An estimated 20 health departments used HIS/Avatar,

the state-supported system because of its cost. However, by the end of 2013, the other 65 LHDs were adopting higher-cost options for EMR and billing such as *Patagonia*, *CureMD*, *Insight*, *M&M Visual Health Net*, *McKesson Practice Partner*, *Allscripts*, *GE*, *Centricity* and *Cerner*.

**NC EDSS:** Baseline assessment of STD reporting in NC EDSS shows that approximately half of the local health departments report in a timely manner. “Timely manner” is defined as: the case is investigated promptly, treated within two weeks of laboratory diagnosis, and reported to the state within 30 days of diagnosis.

**New Requirements:** Finally, the statewide assessment supported past experiences with introducing new requirements for local health departments as part of the Consolidated Agreement between DPH and local public health. Local health generally takes several years to adjust to new program requirements. For example, for FY 2013-2014, DPH required all local health departments to complete the Overview of STD Morbidity within their community. However, only a handful of agencies had

started the process at the time of the site visit.

During 2014-15, DPH requires all local health departments to document the insurance status of all clients seeking care for an STD. Without specific intervention, local agencies may be slow to adapt to the changes in program requirements.

**Response**

As a result of the statewide assessment, the Communicable Disease Branch initiated a series of nine regional trainings (18 available training dates) to share results and begin the process of re-training the public health workforce to follow CDC guidelines for evaluation, testing, and counseling of STD clients. Consultants also identified a need to target mid-level providers and physicians working in local health department settings with discipline specific communication.

In addition to training, DPH modified the Consolidated Agreement Addenda 536/541 with LHDs to reduce the required number of examinations from 100 to 50 that STD ERRNs must perform annually to maintain a rostered status. The reduction allows LHDs to reduce costs associated with nurses traveling for the two-day clinical experiential in Greensboro while still assuring competency because of the direct practice observation every three years.

NOTED SUCCESS

Importantly, clinicians in local health department STD clinics adhere to the CDC treatment guidelines.

# North Carolina Public Health Preparedness Capabilities Rubric

By Shanae Godley, MPH

NC Public Preparedness and Response (PHP&R) has made great strides in building our public health preparedness capabilities since our initial assessment in 2011. The capabilities rubric was designed and implemented to track progress and provide a current snapshot of the NC public health preparedness system. The utility of the rubric is threefold: 1) it describes progress within each capability; 2) it identifies gaps and weaknesses and 3) it can be used to prioritize and map future preparedness activities.

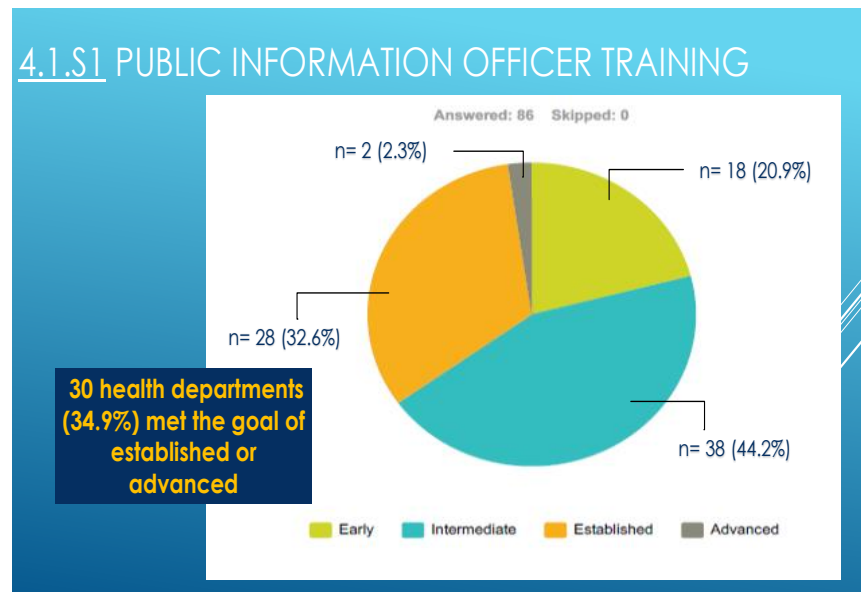
The Planning, Implementation and Exercise (PIE) Team in the PHP&R regional offices developed the rubric for over 50 priority elements within the Public Health Emergency Preparedness Cooperative Agreement (PHEP) preparedness capabilities. Each element has at least four steps of progression: early, intermediate, established and advanced. In February 2015, all 86 Local Health Department preparedness coordinators completed the Rubric for the first time.

Activities that were considered gaps in 2011 are now reflected as strengths. Specifically, the rubric has identified improvement in “at-risk population planning”, “public information responsibilities and training” (Table 1; Figure 1), and ‘respiratory protection planning and training’. In the coming years, PHP&R will make an effort to close newly identified gaps in our

**Table 1.** Example of the rubric for capability 4.1.S1: Public Information Officer Training Requirements.

Planning Progression			
Early ➡	Intermediate ➡	Established ➡	Advanced ●
Less than 25% of the LHD Public Information staff has the required National Incident Management System training (NIMS) training.	25-75% of LHD Public Information staff has completed the required National Incident Management System training (NIMS) trainings:  <input type="checkbox"/> IS-100.b – ICS Intro <input type="checkbox"/> IS-200.b – ICS for single resources <input type="checkbox"/> IS-250 - ESF 15 <input type="checkbox"/> IS-700 – NIMS Intro <input type="checkbox"/> IS-702.a – NIMS Public Info System <input type="checkbox"/> IS-800.b – National Response Framework	More than 75% of LHD Public Information staff has completed the required National Incident Management System training (NIMS) trainings:  <input type="checkbox"/> IS-100.b – ICS Intro <input type="checkbox"/> IS-200.b – ICS for single resources <input type="checkbox"/> IS-250 - ESF 15 <input type="checkbox"/> IS-700 – NIMS Intro <input type="checkbox"/> IS-702.a – NIMS Public Info System <input type="checkbox"/> IS-800.b – National Response Framework	100% LHD Public Information staff has completed the recommended National Incident Management System training (NIMS) trainings <b>AND</b> a policy has been adopted for staff to receive updated trainings on a regular basis:  <input type="checkbox"/> IS-100.b – ICS Intro <input type="checkbox"/> IS-200.b – ICS for single resources <input type="checkbox"/> IS-250 - ESF 15 <input type="checkbox"/> IS-700 – NIMS Intro <input type="checkbox"/> IS-702.a – NIMS Public Info System <input type="checkbox"/> IS-800.b – National Response Framework

**Figure 1.** Rubric progress output for capability 4.1.S.1.



state. For example, we will work with our partners to address pediatric healthcare needs in preparedness planning. The capabilities rubric will be used as a continuous analysis tool within PHP&R to capture the progress of our preparedness program as we work closely with our local public health agencies and partners to build a more prepared and resilient preparedness system. Most importantly, it will also be used at the local level as a road map for future programs and to document their successes.

# NEWS & EVENTS

6TH ANNUAL COMMUNICABLE DISEASE CONFERENCE

## STRONG FOUNDATIONS FOR FLEXIBLE RESPONSE

Wednesday – Friday  
April 29 – May 1, 2015  
Sheraton Downtown Raleigh  
421 S. Salisbury St.  
Raleigh, NC 27601

### Target Audience

Physicians, Physician Assistants, Nurses, Nurse Practitioners and Medical Directors who work with communicable disease

### Learning Objectives

- Describe lessons learned from Ebola.
- Identify the most common vector-borne disease surveillance components and new emerging vector-borne disease.
- Explain cultural sensitivity as it relates to different populations within N.C.
- Review interpretation of lab results, surveillance data, and outbreak response related to food-borne diseases.
- Discuss new rabies guidance documents and partnership strategies for

The 6th Annual Communicable Disease Conference provides an opportunity to share best practices for communicable disease investigations of public health significance. The availability of state subject matter experts to dialogue with local partners fosters professional development and improves surveillance and investigation. The content of this training is intended to partially satisfy requirements for both Local Health Department Accreditation and selected Agreement Addenda.

- effective local rabies control programs.
- Describe the current guidelines in the evaluation of clients seeking care for STD/STI.
- Recognize the context for Practice Management in LHDs.
- Utilize tools of epidemiology to publish and share findings from outbreak investigations in poster sessions.
- Practice skills acquired through training using case study and outbreak investigation tabletop exercise.

## Annual Public Health Preparedness Symposium

The 2015 North Carolina Annual Public Health Preparedness Symposium will be held on May 20-22, 2015 in Asheville. It's an exciting time for North Carolina Public Health Preparedness and Response as we continue to grow and adapt, and get ready to plan, prepare, respond and recover. This year's committee has been hard at work and has developed a wonderful meeting agenda with topics and speakers openly recruited. The symposium speakers are experts in their fields and will bring a wealth of knowledge in the preparedness field to attendees. The core symposium is two days, May 21-22, 2015. The pre-conference day, May 20, 2015, will have specialized tracks: one for new Local Health Department Preparedness Coordinators; one for those with more experience so they can hone their skills. It is our hope that this year's symposium will rejuvenate as well as inspire those in the preparedness community, not just in Public Health but our partners as well, to be ready whenever the public needs us.

[ For more Information ]

Mountain Area Health Education  
Center (MAHEC)

[https://sys.mahec.net/ce/detail.aspx?  
eid=46222&sid=0&str=1](https://sys.mahec.net/ce/detail.aspx?eid=46222&sid=0&str=1)





Pictured from L-R: Dr. Megan Davies, John Peebles, Recipient Jenni Wheeler, Evelyn Foust and Dr. Anne Hakenewerth

## Employee of the Quarter: **Jenni Wheeler**

Jenni has been doing the work of three staff members for much of this year: (1) the HIV Surveillance Epidemiologist position that was vacant until August; (2) the SPNS-LINK Epidemiologist position vacated in May and filled in September; and (3) her own position as the HIV Care Epidemiologist. She has triaged requirements for each position in a very professional manner, communicating with management and other epidemiologists and analysts in the Branch, and with outside grant and funding partners, to plan for and meet deadlines, and to arrange for

realistic deadline extensions where possible. She has mentored the new HIV Surveillance and SPNS-LINK epidemiologists as they learn their jobs, including meeting granting agency deadlines for data analyses, reports, and files. Jenni also went far beyond the expected to prepare data and presentations for

most of our CDC site visits this year, in particular the Care and Prevention in the United States (CAPUS) Demonstration Project site visit in September. The CAPUS project does not have its own analyst or epidemiologist, though CDC and HRSA are now very interested in using HIV surveillance data to show how we are supporting the HIV Care Continuum. Jenni admirably stepped into this ad hoc role, the analyses and presentations that she did left a positive impression in the minds of the CAPUS site visitors regarding North Carolina's work on this project. Jenni has professionally and caringly mentored new epidemiologist employees as they begin work at CDB. Lastly, she has consistently met HIV funding agency requirements in the face of drastic resource shortages.



## Epidemiology Section Offices

Communicable Disease Branch  
(24/7 on-call)  
**919-733-3419**  
HIV/STD Program  
**919-733-7301**  
TB Program  
**919-733-3419**

Occupational & Environmental  
Epidemiology Branch  
**919-707-5900**

Public Health Preparedness  
and Response  
**919-715-0919**  
PHPR Emergency 24/7  
**919-820-0520**

Rabies Emergency  
(Nights, Weekends, Holidays)  
**919-733-3419**

State Laboratory of Public Health  
**919-733-7834**

## FIGURE 2

### The Disease Detectives conducting a cohort study in their neighbourhood



Courtesy of CDC Disease Detectives Course

**Editor:** Aaron Fleischauer, PhD MSPH

State of North Carolina | North Carolina Department of Health and Human Services  
North Carolina Division of Public Health | Epidemiology Section  
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